(No Model.)

E. R. SPENCER.

LACING BEARING.

No. 342,940. Patented June 1, 1886.

Fig. 1.

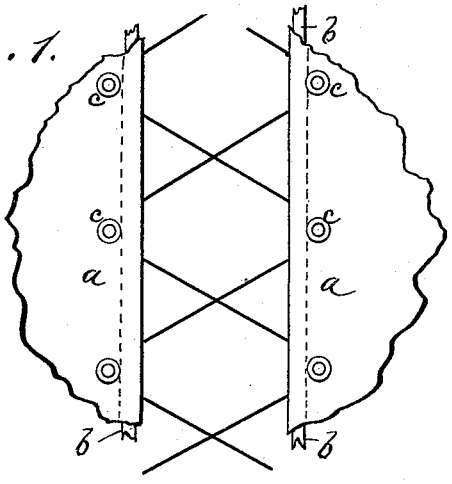

Fig. 2.

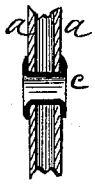

Fig. 3.

Fig. 4.

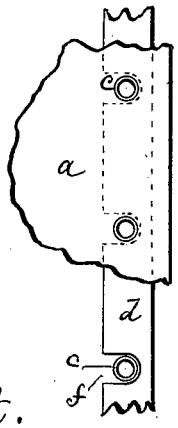

Fig. 5.

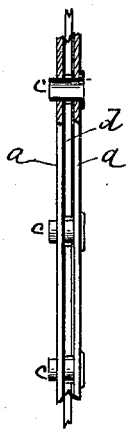

Fig. 6.

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UNITED STATES PATENT OFFICE.

ESTHER R. SPENCER, OF ROCHESTER, NEW YORK, ASSIGNOR OF THREE-FOURTHS TO JOSEPH C. WILSON AND HOBART E. ATKINSON, BOTH OF SAME PLACE.

LACING-BEARING.

SPECIFICATION forming part of Letters Patent No. 342,940, dated June 1, 1886.

Application filed December 10, 1885. Serial No. 185,252. (No model.)

To all whom it may concern:

Be it known that I, ESTHER R. SPENCER, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Lacing-Bearings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to lacing-bearings for corsets, gloves, shoes, and other analogous articles, and to that class of such articles in which double flaps or flies are used, between which the bearing rests and around which said lacing-cord passes between the flaps. Various devices for this purpose are known, but are more or less complicated and expensive. In one case the bearing consists of a shaft run through the double flaps riveted to washers at the ends, and having a roller in the center. In another a shouldered shaft is used with two washers at each end, one outside and the other inside the flap, which is clamped between them, and a roller is used in the center. In another a hollow pulley-shaped bearing is used having eyelet-ends that clamp the cloth against the shoulders. In another an eyelet-shaft is used with a pulley thereon lying between the flaps, and the ends of the shaft upset to fasten the parts together.

It is the object of my invention to use but a single piece to form the bearing, the same being in the form of an elongated hollow eyelet, which is clinched at the ends to hold the flaps of the cloth, with space enough between the flaps for the lacing-cord, thereby securing great cheapness over those devices in which two or more parts are used, or when the device is of such complicated construction as to make it expensive to manufacture. An ordinary eyelet will not do, because it will close the sides of the cloth and prevent the passage of the lacing-cord. Therefore, to allow passage of the cord the bearing must be of considerable length, and in upsetting the ends it must not be crushed together like a common eyelet.

In the drawings, Figure 1 is a diagram showing two pieces of a corset with my improvement applied thereto. Fig. 2 is a vertical cross-section of the double flaps, showing one of the bearings in place. Fig. 3 is a longitudinal section of the bearing detached. Figs. 4, 5, and 6 are diagrams illustrating the method of attaching the bearings to the flaps.

a a show the double flaps to which the bearings are to be attached. These flaps have in their outer edges, sewed in, very thin strips of metal *b b*, or other suitable material, which are used, not as stiffeners, but stays, to strengthen the bearings and prevent them from being pulled out.

c c c are the bearings, the same consisting of elongated eyelets of the form shown in Fig. 3. These eyelets are inserted through holes punched in the fabric, and are headed or pinched up at the ends, so as to hold outside the flaps and prevent them from slipping off. The eyelets are of such length that when so nipped up at the ends they do not close the flaps together, but leave space between the flaps for the lacing-cord to pass through and run freely. It has been found that the cord will run easier and with less friction around a smooth stationary bearing than around a rotating pulley.

Figs. 4, 5, and 6 illustrate the means of attaching the bearings without crushing them together. *d* is a strip of metal whose thickness is equal to the distance to be preserved between the flaps. This strip is provided with notches *f f* on one edge large enough to go over the eyelets. This strip is inserted flatwise between the double flaps, the notches embracing the eyelets, and the ends of the latter can then be pounded or headed down, leaving the desired space between the flaps, after which the strip can be withdrawn.

The great advantage of this invention is its great simplicity and cheapness, as being made of but one piece it is almost as cheap as common eyelets. It enables double flaps to be used, and allows the lacing-cord to pass around the bearings in the same manner as around pulleys, thus differing from common eyelets, which can be laced only through the openings of the eyelets. It obviates the necessity of any washers or other attachments. It is much simpler, cheaper, and more effective than the ordinary devices used in a similar way and made of two or more parts or of peculiar and expensive construction.

In addition to the above, the stays *b b* in the edges of the flaps serve an important purpose, which is to prevent the bearings from tearing out.

Having described my invention, I claim—

1. The combination, with the double flaps *a a*, of a bearing consisting of an elongated hollow eyelet inserted through holes in the flaps and headed up at the ends, substantially as described, leaving a space between the flaps for the passage of the lacing-cord to run around the bearing, as set forth.

2. The combination, with the double flaps *a a*, of the bearings consisting of elongated hollow eyelets inserted through holes in the flaps and headed up at the ends, substantially as described, leaving a space between the flaps for the passage of the lacing-cords to run around the bearings, and the stays inserted in the edges of the flaps outside the bearings, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ESTHER R. SPENCER.

Witnesses:

R. F. OSGOOD,

JACOB SPAHN.